

ABSTRACT

A method and handheld device for scanning an object and creating a complete image of the object, even under low light conditions. The handheld device contains a camera module and a motion sensor assembly. The handheld device is moved so that the camera module takes a plurality of images of an object. A motion sensor assembly in the handheld device detects motion of the handheld device and movement information from the motion sensor assembly is used to modify each of the plurality of images to remove distortions therein caused by movement of the camera module. The plurality of images are combined to generate a reconstructed image of the object. For taking images under low light conditions, each of the plurality of images are added together to generate a brightened image.